

Power Editor



INSTRUCTION MANUAL

Application: TOYOTA VELLFIRE [TAHA40W/45W]

E05253-T45020-00
May 2024
Ver. 3-1.01

1. Introduction

Thank you for your purchase of Power Editor.

- This manual indicates items that require attention in order to install this product safely and lists precautions to avoid any possible damage and/or accidents.
- This product was designed based on installation onto a specific factory vehicle or a vehicle using other HKS products. The performance and/or safety cannot be guaranteed if this product was installed onto other inapplicable vehicles.
- Contact HKS dealer for any lost parts, replacement, and this manual.
- HKS will not be responsible for any damage caused by incorrect installation and/or use of this product.
- This product works only with a vehicle with DC12V negative ground.
- The specifications of this product are subject to be changed without notice.
- This manual is subject to be revised without notice.
- When removing factory parts, refer to the factory manual. The factory manual must be purchased if you don't have it.

Product	Power Editor
Code Number	42018-AT022
Use	Boost up of turbocharged vehicle
Application	TOYOTA VELLFIRE [TAHA40W/45W] ※T24A-FTS

2. Safety Precaution

The following precautions for use of this product are to prevent possible accidents and/or injuries and for proper use.

⚠ WARNING : Indicates risk of serious injury and/or possible death.

⚠ CAUTION : Indicates risk of serious injury or property damage.

⚠ WARNING

- Make sure to work on the vehicle in a well-ventilated area to prevent possible explosion or a fire.
- Make sure to hold connectors when removing them to avoid possible damage to other electronics parts and/or a fire caused by disconnection or a short circuit.
- Stop using the product if any unusual situation is noticed. Consult the dealer immediately. Failure to do so may cause an electric shock, burn out, or damage to the vehicle.
- Make sure to work on the vehicle in area where a vehicle can be parked safely.


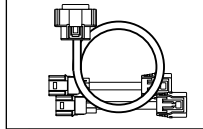
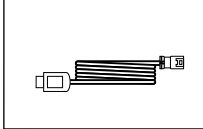
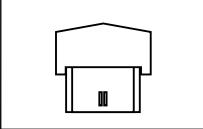
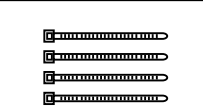
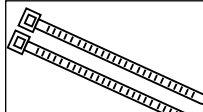
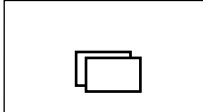

⚠ CAUTION

- Do not install this product by yourself.
- Do not modify, disassemble, and/or remodel the product and attached parts to avoid any damage to the unit and/or harness.
- To avoid possible malfunction and damage to the engine, install the unit away from excessive heat or water/moisture.
- Make sure all connections and wiring are not disconnected, short circuited, or incorrect. If so, it may cause an electric shock, burn out, or damage to the vehicle.
- If any unusual noise, scents, and/or vibrations are noticed, consult the dealer immediately.
- If any unusual noises, scents, and/or vibrations are noticed while driving, please refer to a factory repair manual.
- Confirm the following before reading the ECU data with this product:
 - The ECU is a factory standard.
 - Data on the ECU is not modified.
- Desorption of the connector, please go Always hold the connector.
 - If you pull the cable, there is a possibility of disconnection.
- Before an automobile inspection and/or repair, It is necessary to remove this product.
- Daily maintenance on the vehicle is the responsibility of the owner.

3. Product Features

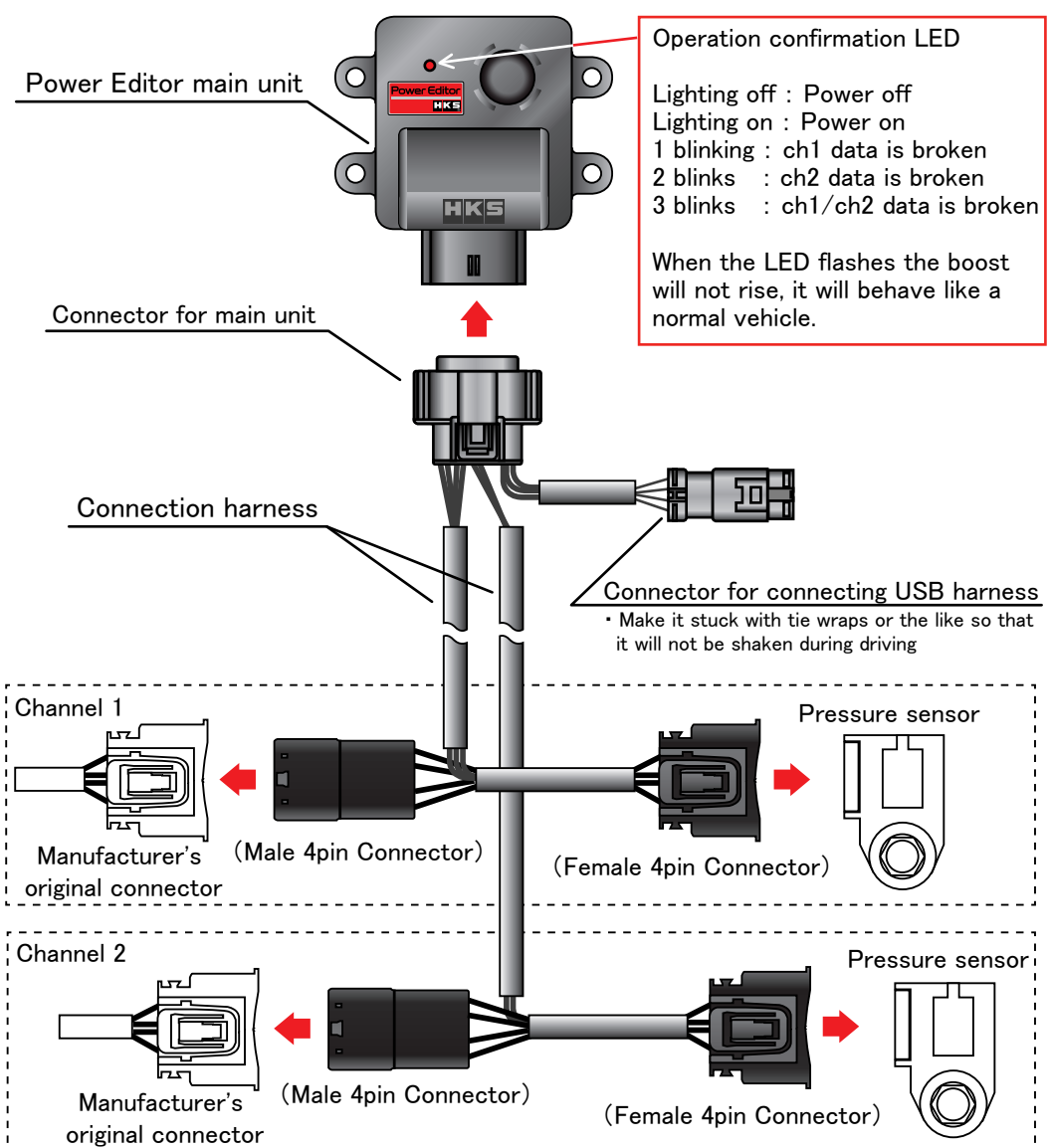
- By connecting this product between Pressure sensor and Manufacturer's original connector, boost can be easily raised.
- Even after installing this product, you can return to the normal state by connecting the "return connector" instead of the Power Editor main unit.
- You can change the data for the boost up of the main unit by connecting to the personal computer with USB harness included in the product and using Easy Writer for Power Editor.
Easy Writer for Power Editor is downloaded from the HKS homepage.

4. Parts List

			
1 Power Editor	2 Connection harness	3 USB harness	4 Connector to return to normal
1pc.	1pc.	1pc.	1pc.
			
5 Tie wrap (small)	6 Tie wrap (large)	7 Double-sided tape	8 Instruction Manual
4pc.	2pc.	2pc.	1pc.

5. Installation procedure

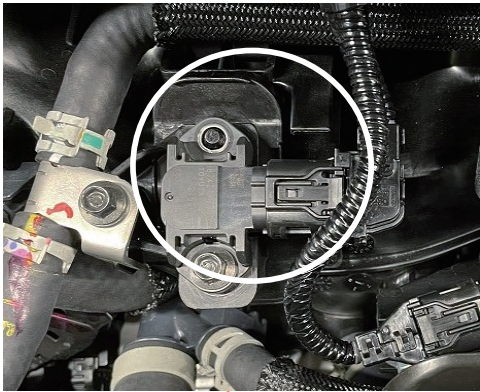
1. Stop the engine of the vehicle and Disconnect the cable terminal from the negative terminal of the battery.
2. Install the Power Editor main unit in an arbitrary place.
 - Avoid the following places.
 - Places where the temperature becomes high like the engine body.
 - Places where direct water is applied.
 - Confirm that the connection harness reaches the pressure sensor.
 - When using double sided tape, clean the surface to be pasted, paste it, and use tie wraps together.
When pasting with double-sided tape only, it is dangerous when it peels off due to aged deterioration.
3. Connect the Power Editor main unit and Connector for main unit.



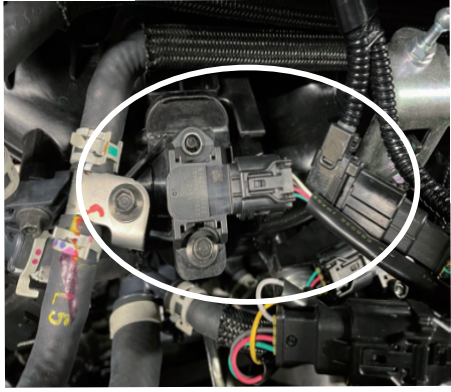
4. Disconnect Manufacturer's original connector from Pressure sensor, and wire the connection harness of Power Editor.
 - Since the boost-up data of channel 1 and channel 2 are the same at factory shipment, even if the connection to the pressure sensor is reversed, it operates normally.
 - Please be aware of the channel order during modifying boost-up data by Power Editor EasyWriter software.
5. Lock the connection harness of Power Editor with tie wrap so as not to hinder the running of the vehicle.
 - Places where the temperature becomes high like the engine body.
6. After confirming that all connectors are correctly connected, connect the cable terminal to the negative terminal of the battery.
7. Turn the ignition on and check that the LED of the Power Editor main unit lights up.
 - Even if the ignition is turned on, if the LED does not light up, poor contact of the connector may be considered.
8. When disconnecting connector of the vehicle factory harness white plastic parts and the orange rubber seal might come off. If these parts enter inside connector of the harness, please use pliers or another tool to pull them out then reconnect to the factory connector.

6. Recommended Power Editor installation location and Pressure sensor location

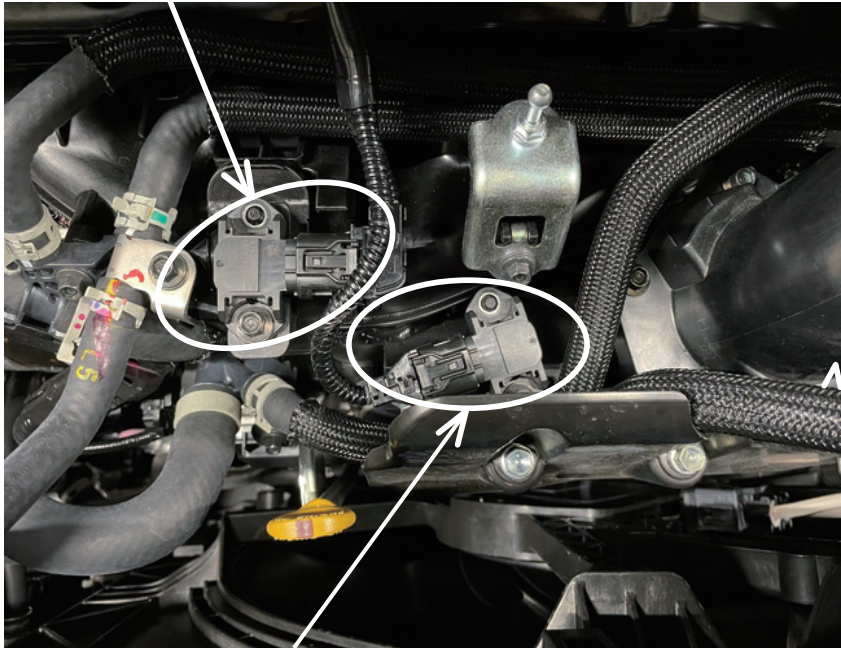
- Leaving the engine cover off.
Pressure sensor location
(Channel 1 : white line)



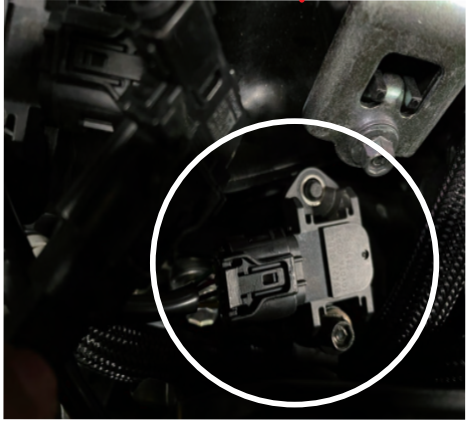
Connect the harness of Power Editor



Direction of view



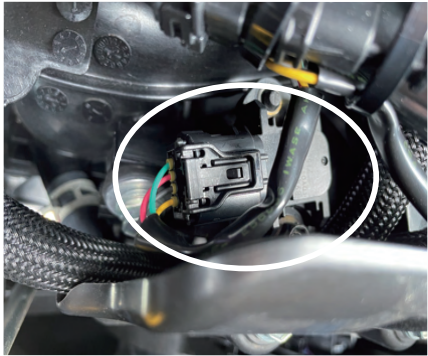
Direction of view



Pressure sensor location
(Channel 2 : yellow line)



Power Editor installation loaction



Connect the harness of Power Editor



Install Power Editor main unit

7. Troubleshooting

When the product does not function properly, check the following to see if there is any measure against the symptom appeared.

Symptom	Cause	Measure
The check lamp blinks only when the Power Editor is connected. Or boost does not go up.	The connector is disconnected.	Reseat connector of pressure sensor and connector of Power Editor main unit.
	Wire harness is broken.	Request repair of Power Editor.
	Power Editor is out of order.	
Power Editor's LED is blinking.	Data writing failed with Easy Writer exclusive for Power Editor.	Write data again with Easy Writer exclusive for Power Editor.
Factory boost meter doesn't display an increase in pressure.	-	Factory boost meter might not display an increase in pressure. Actual boost was measured, and normal operation was confirmed. This issue doesn't affect vehicle operation.

8. Maintenance

⚠ WARNING

- Do not use this product if unusual occurrences should occur to avoid risk of electrical shock and/or fire. Consult with the dealer immediately.

⚠ CAUTION

- Do not try to repair the product yourself. Consult with your dealer.
- If any unusual noises, scents, and/or vibrations are noticed while driving, please refer to a factory repair manual.

9. Repair Service

For questions about this product, any optional, lost, defective and/or damaged parts, please contact your dealer.

10. Product Specifications

- Operating Voltage DC5V - 16V
- Operating Temperature -20 - 100℃
- Outer Size 90.0 x 84.0 x 35.0mm

11. Revision of Manual

Rev. Number	Date	Details
3-1.01	2024/5	1st Edition